

# The State of New Hampshire

# Department of Environmental Services



## Michael P. Nolin Commissioner

Pat and William Blydenburgh 2605 2<sup>nd</sup> NH Turnpike Deering, NH 03244

September 27, 2005 **Letter of Deficiency** DSP#05-015

RE: Oscar Young Dam #062.07, Deering

Dear Mr. and Mrs. Blydenburgh:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 302.02, an inspection of the subject dam was conducted on May 18, 2005. During this visual inspection and/or file review, the following deficiencies were observed:

- 1. The operation and maintenance plan (O&M) is out of date. Owner's name and contact information are incorrect;
- 2. There is minor brush and sapling growth along the upstream face of the dam;
- 3. There is extensive brush and sapling growth on the downstream face of the dam;
- 4. The emergency spillway is overgrown with trees and brush;
- There is extensive tree and brush growth along the upstream and downstream faces of west side dike (dam access road);
- 6. There are seepage flows at the downstream right toe of the dam embankment; and
- 7. The dam embankment, outlet control structure, emergency spillway, and west side dike were not constructed in conformance to the plans submitted with the 1978 permit application. Calculations indicate the existing structure will not safely pass the 50 year storm flow.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

#### November 15, 2005:

- 1. Submit an updated O&M plan for the dam;
- 2. Remove brush and saplings from both sides of the dam embankment and the emergency spillway;
- 3. Remove trees and brush from the west side dike;
- 4. Complete a survey of the dam crest, spillway area, and dike road to determine existing topography and structural dimensions;

DES Web site: www.des.nh.gov

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#### February 15, 2006:

5. Complete an Application to Reconstruct a Dam, proposing modifications to spillway and/or control structure sufficient to allow passage of the 50 year storm event with 1' freeboard at dam crest and west side dike. Plans for a Class A structure must be stamped by a NH licensed professional engineer familiar with dam design;

Keep in mind that the existing CMP (corrugated metal pipe) outlet is approaching its design life, and replacement of the discharge structure may be necessary in the near future. Dimensional changes to this outlet could affect the changed required for the emergency spillway.

### December 1, 2006:

6. Complete structural modifications in accordance with the plans, as reviewed and approved by DES, resulting from item 5, above;

## On a Continuing Basis:

- 7. Monitor seepage at downstream toe. Changes in quantity and/or turbidity can be indicators of a compromised embankment and should be promptly investigated; and
- 8. Control vegetative regrowth on dam and dike.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. Please call or write to our office if the repairs are completed ahead of the aforementioned schedule so that DES may schedule a follow-up inspection. Unless notified otherwise, DES will conduct the follow-up inspection on or after the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the bottom of the previous page.

Henry H. Kunhardt, P.E. Dam Safety Engineer

Attachments Copy of O&M plan currently on file, Guideline for an O&M plan, DB8, DB13, Sketch Illustrating Deficiencies

cc: Gretchen R. Hamel, Legal Unit Administrator

Town of Deering

Certified # 7000 1670 0000 0588 6516

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